

INSTRUCTIONS AND TOOLS FOR LNV SITE SETUP

This document contains instructions for setting up the Polycom HDX 7000 at each school site. It also includes instructions for tools to help determine whether firewall traversal is working from the site where you are installing.

You will need to download Polycom PVX from http://downloads.polycom.com/video/pvx/804/PVX_8_0_4_4035.zip

You will need the following items from \\NORTHEAST\Company\LNV\Install_kit :

- **LNV_Logo_Flat_01.PNG** – LNV logo for Polycom Screen Saver (see below)
- **PathFinder_Client_7_0_0_0_3.exe** – the Pathfinder Client (see below)

Polycom PVX requires a webcam, mic & sound, and Vista or XP w/ Service Pack 2.



CONTENTS

Configuration of the HDX 7000 When Installing at a School Site:	2
Initial Configuration	2
Please also check these items on the Polycom HDX7000 when installing at a school site:.....	3
PVX and Pathfinder Client on the same notebook.	4
Checking the gatekeeper, to determine if Polycom has registered to the traversal server	7

CONFIGURATION OF THE HDX 7000 WHEN INSTALLING AT A SCHOOL SITE:

INITIAL CONFIGURATION

1. On Polycom 1st-use wizard make sure to configure these items using the remote
 - a. Choose American English as the **language**
 - b. Enter any brief **system name** – you can change it later
 - c. Enter the **system password** (you can't do it from the web interface) as “**12345**”

2. From the web interface
 - a. Enter the full site name for the system name, e.g., “Concord High School” (**Admin Settings → General Settings → System Settings → System Name**)
 - b. Enter the IP Network settings at **Admin Settings → Network → IP Network**
 - i. Enter the H.323 Settings
 1. **Enable IP H.323** checked
 2. **Display H.323 Extension** checked
 3. **Enter H.323 Name** (e.g., concord) 
 4. **Enter H.323 Extension (E.164)** (e.g., 5667000) 
 5. **Use Gatekeeper: Specify**
 6. **Gatekeeper IP address: 159.105.0.73**
 - ii. Enter the **Quality of Service** settings
 1. **Type of Service: Diffserv**
 2. **Type of Service Value:**
 - a. **Video: 41**
 - b. **Audio: 41**
 - c. **Control: 41**
 3. **Maximum Transmission Unit Size: Default**
 4. **Enable PVEC: unchecked**
 5. **Enable RSVP: unchecked**
 6. **Dynamic Bandwidth checked**
 7. **Maximum Transmit Bandwidth 40**
 8. **Maximum Receive Bandwidth 40**
 - iii. Enter the **Firewall** settings:
 1. **Fixed Ports: unchecked**
 2. **Enable H.460 Firewall Traversal: checked**
 3. **NAT Configuration: Off**
 - c. Enter the Date and Time settings at **Admin Settings → General Settings → Date and Time**
 - i. **Time Zone: (GMT-5:00) Eastern Time (US & Canada)**
 - ii. **Time Server: Manual**
 - iii. **Time Server Address: ac-ntp1.net.cmu.edu** [or any other valid public TS]

PLEASE ALSO CHECK THESE ITEMS ON THE POLYCOM HDX7000 WHEN INSTALLING AT A SCHOOL SITE:

1. **IMPORTANT: Admin Settings → General Settings → Security → Allow Access To User Settings: checked**
(This allows users to access settings such as Auto Answer, Call Settings, Etc.)*
2. Enable viewing video from the web interface. YOU CAN ONLY DO THIS FROM THE ON-SCREEN INTERFACE with the remote.
System → Admin Settings → General Settings → Security → Security Settings → Allow Video Display on Web: checked
3. Upload the LNV Screensaver Logo
 - a. From the web interface: **Utilities → Screen Saver**
 - b. Follow directions to upload **LNV_Logo_Flat_01.PNG**
4. Increase the number of call speed options: **Admin Settings → Network → Call Speeds**
 - a. **Check everything between 128 and 512** inclusive.
 - b. Also confirm that **768, 1024, 1472, and 1920** are **checked**.
5. On Admin Settings → Network → Call Preference, confirm that
 - a. Preferred Speed for Placing Calls is **384**
 - b. Maximum Speed for Placing Calls is **1920**

*Note:

The “auto answer” setting is found (on the Polycom display screen) under

System → Admin Settings → General Settings → System Settings → Call Settings.

and is called **Auto Answer Point-to-Point Video**.

(The P2P setting *also applies to LNV multipoint meetings*. The **Auto Answer Multipoint Video** setting only applies to Polycom-based multipoint calls, which are not used by LNV)

PVX AND PATHFINDER CLIENT ON THE SAME NOTEBOOK.

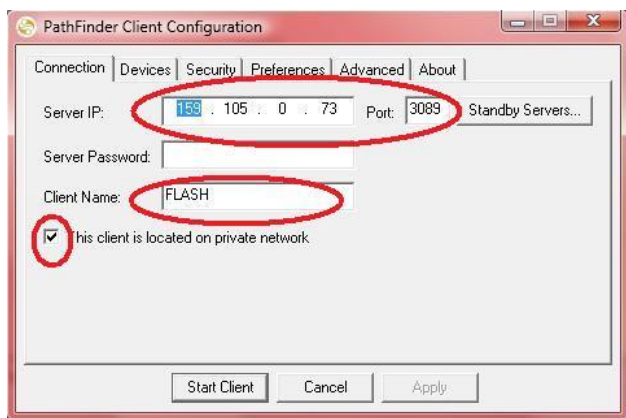
Installing the Pathfinder Client and Polycom PVX on your test notebook allows you to simulate a Polycom to test firewall traversal.

When PVX is in trial mode, you can make unlimited calls less than 5 minutes long. You have to follow the port instructions below carefully, and the order of starting things is important.



INSTALLATION:

1. **Install the Pathfinder Client.** DO NOT install as a SERVICE. After installation, open the client and configure as follows:



Server IP and Port: 159.105.0.73 3089

Client Name: [your machine name] (anything ok)

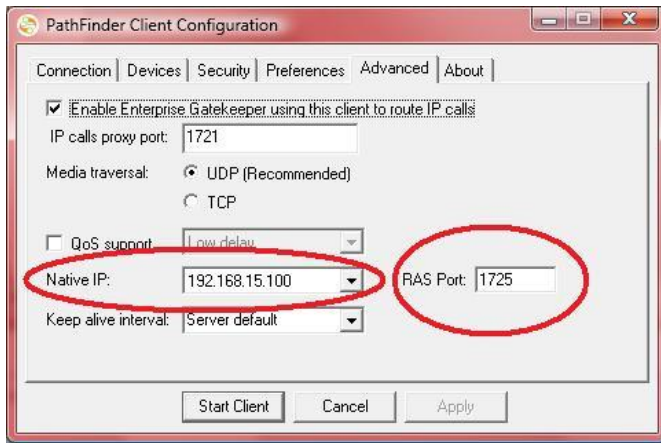
This client is located on private network: checked

2. **Preferences** tab:



Uncheck all

3. **Advanced** tab



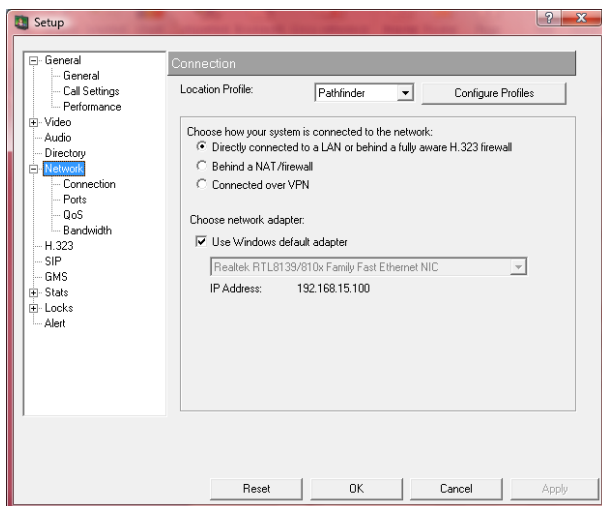
Make sure you choose your Ethernet port IP. RAS Port must be 1725

No need to make changes on Devices, Security, or About tabs.

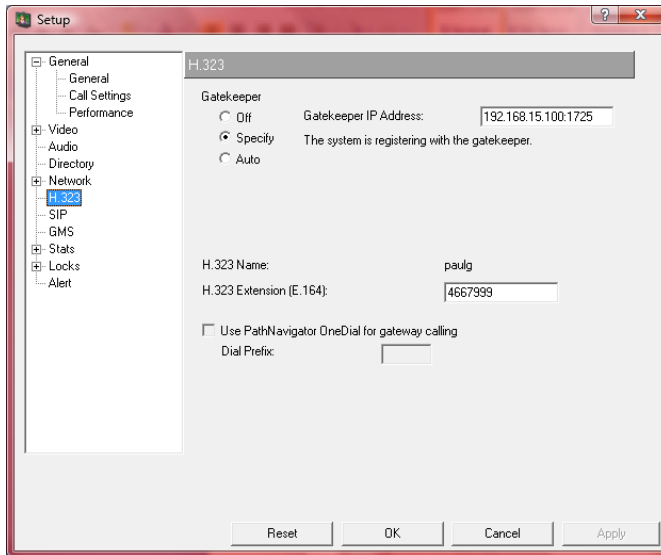
- Go back to the **Connection** tab and **clear the password**. Click **Start Client**. If the client connects successfully, you should see the following:



- Now install PVX**. Take the defaults. After installation, open Setup (the little wrench icon on the title bar)



- Open **Network** → **Connection** Choose: **Directly connected to LAN or behind a fully aware H.323 firewall**. **CLICK APPLY!**



7. Open H.323

In **H.323 Extension (E.164)** enter **[your assigned address]**

Choose **Specify**

In **Gatekeeper IP Address**, enter **[your notebook's IP address]:1725** (Unlike the usual way you set up the gatekeeper – where you just enter the IP address and let the Polycom enter the port – here the :1725 is required and critical.)

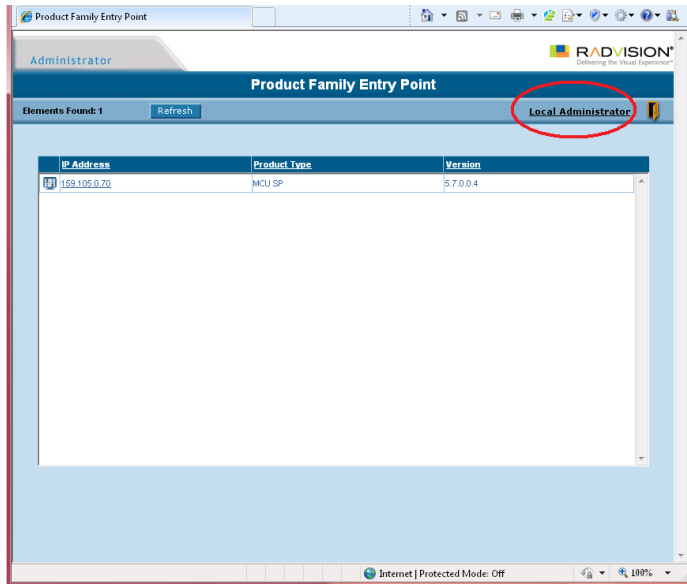
(Remember to change this address to reflect your notebook's address on the site's network)

CLICK APPLY!

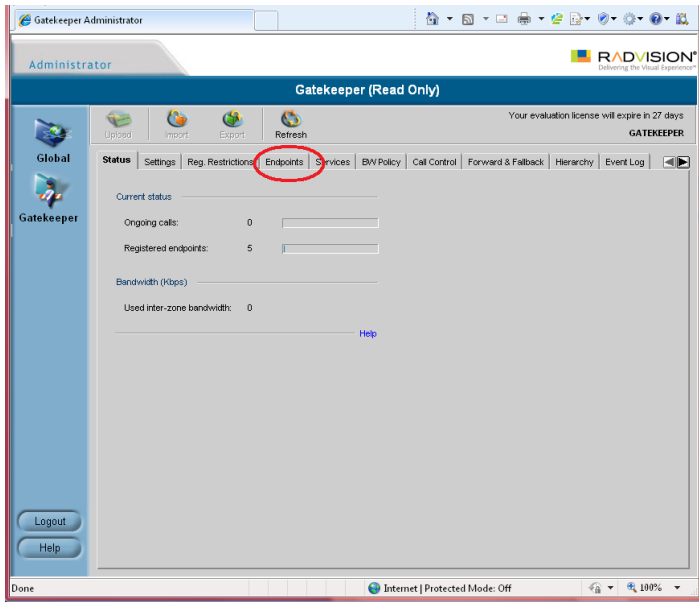
- 8. If PVX indicates that "Gatekeeper registration was successful" you are ready to make calls.**
- 9.** You should now be able to see your PVX registered on the gatekeeper (see next section) and you can call the NCS Polycom at 5851999.
- 10.** Now that everything is installed, you must follow this sequence when you use PVX:
 - a.** Open the Pathfinder Client
 - b.** On the Connection tab, clear the password.
 - c.** Click Start Client and wait to be sure the client has registered
 - d.** Start PVX – make sure there is no yellow triangle on the front screen, indicating a problem (i.e., a problem registering to the PF Client)

CHECKING THE GATEKEEPER, TO DETERMINE IF POLYCOM HAS REGISTERED TO THE TRAVERSAL SERVER

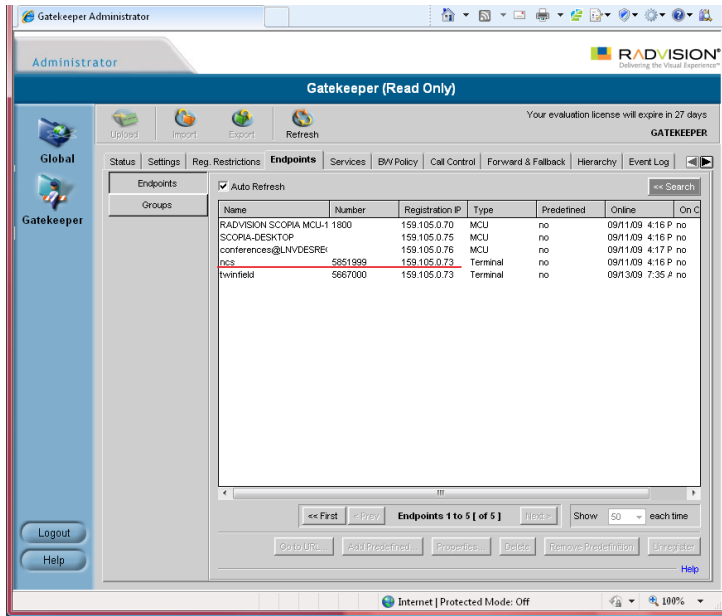
1. Use **Internet Explorer (only)**.
You must have Java loaded (not the MS version, the real one from www.java.com)
2. Open <http://meetings.learn.vt.gov:8080/>
(Note: if you don't add the 8080 port number, you'll get to a *different* login, that looks similar but won't let you in – you **don't** want the login that says “iView Communications Manager”)
3. When you log in, you'll see the screen below. Click on **Local Administrator**.



4. When you get to the next screen, wait for Java to load the applet – might take several seconds at least. You should see the following screen. Click on the **ENDPOINTS** tab.



5. The Endpoints screen may take a few seconds to load. If you see the name of the Polycom you are configuring (with IP address 195.105.0.73), it has registered with the traversal server.



6. Please click the **LOGOUT** button when you are done.